COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

BAY STATE GAS COMPANY	)	**D.T.E. 05-27**

DOER's FIRST SET OF INFORMATION REQUESTS

Pursuant to 220 CMR §1.06(6)(c), the Department of Energy Resources ("DOER") submits to Bay State Gas Company ("Bay State" or "Company") the following Information Requests. They are subject to the same instructions as set forth in the Department's Information Requests in this proceeding. Please provide three complete copies of all responses.

DOER 1- 1: Refer to Exhibit BSG/LRK-1, pp. 7-8. Please prepare a table comparing the Company's proposed X-factor to those *proposed* by Boston Gas in their original rate indexing plan (1996) and the most recent plan for Blackstone Gas (DTE 04-79). Please also include a comparison of the Company's proposed X-factor to the X-factors *approved* by the Department in each of these two plans.

DOER 1-2: Please explain the underlying assumptions of the Company's use of the same productivity and inflation differentials that were approved for Boston Gas for Bay State's Rate Indexing Proposal.

DOER 1-3: Adopting the assumption used by the Department in past proceedings that an ideal PBR formulation uses a price index that is related to the costs found in the specific company or industry, please explain the relationship between GDP-PI and gas utility costs, including in your response the following information:

a. an identification of available gas industry inflation indices;
b. an explanation addressing the use of a more indicative inflation factor, such as timely Bureau of Labor Statistics data to compute an index of gas distribution costs; and
c. an explanation addressing the need to include an input-price adjustment to the X-factor if a more appropriate index of gas distribution costs were calculated.

DOER 1-4: Refer to Exhibit BSG/LRK-1, p. 4, where it states "TFP growth is defined as the change in the total output supplied minus the change in inputs used to produce output…Input price growth refers to inflation in the prices paid

for the inputs used in production." Does the Company's proposed X-factor exclude any input or cost elements either for the natural gas industry or the U.S. economy as a whole?

DOER 1-5: Please explain whether the proposed X-factor would be the same for all Northeast gas companies, and, if so, please reconcile this with the conclusion that Bay State is a "significantly superior O&M cost performer within the US gas distribution industry" (BSG/LRK-1, p. 14).

DOER 1-6: In the previous benchmarking for Boston Gas (03-40), Boston Gas costs were found to be 27% below their predicted value, which is higher than the 14% that is reported for Bay State Gas (BSG/LRK-1, p. 14). Please reconcile this observation with the statement that Bay State's cost reductions due to the rate freeze were much greater than for Boston Gas (BSG/LRK-1, p. 13).

DOER 1-7: In BSG/LRK-1, p.14, you state "Bay State's O&M costs were 14.4% below their predicted value." Please perform the same calculation for Boston Gas and all the companies in your gas distribution sample.

DOER 1-8: Assume a PBR adjustment of 1.7% (gas industry price input inflation less productivity and consumer dividend offsets), please calculate:

a. The Company's overall rate adjustment assuming that the Company's "cast off rates" *exclude* all "accumulated costs associated with eligible steel distribution facilities that the Company has already replaced" (BSG/LRK-1, p. 17).
b. The Company's overall rate adjustment assuming that the Company's "cast off rates" *include* all "accumulated costs associated with eligible steel distribution facilities that the Company has already replaced" (BSG/LRK-1, p. 17).

DOER 1-9: Refer to Exhibit BSG/JAF-2, pp. 26-27 and Schedule JAF-2-9. Please calculate and provide, separately, the % monthly bill increase for an average usage customer in each customer class due to (a) the PBR adjustment, (b) the SIR base rate adjustment, and (c) the EES adjustment.

DOER 1-10: Refer to Bay State's response to DTE-4-36. Please provide the same calculations for the "gas distribution industry," as defined for use in the X factor formula.

DOER 1-11: Refer to Exhibit BSG/LRK-1, p. 10, please estimate the costs of updating a productivity study for Bay State. Please use this estimate to calculate this cost as a % of the Company's annual revenue requirements for Berkshire and for Bay State Gas.

DOER 1-12: Refer to Exhibit BSG/LRK-1, p. 13, where you state "the Company's O&M costs exhibited a much sharper decline after the freeze was implemented than did Boston Gas's O&M costs after the introduction of its first rate indexing PBR Plan." Does this imply that higher X-factors produce greater cost decreases? Please explain.

DOER 1-13: Refer to Exhibit BSG/LRK-1, p. 14, please explain why a benchmarking study that focuses only on O&M costs is used as an indicator of cost performance in a capital-intensive industry, instead of a benchmarking study that focuses on total costs. What is the relationship between superior O&M cost performance and superior total cost performance?

DOER 1-14: Refer to Exhibit BSG/LRK-1, p. 15, where you state, "The evidence shows that the Company has responded more strongly to the incentives created by its rate freeze than did Boston Gas to its first PBR plan. This evidence implies that the Company has fewer opportunities to achieve incremental productivity gains in the future…" Does this statement assume that both companies started from the same productivity level at the beginning of their respective rate freeze or PBR plans? Please explain.

DOER 1-15: Please provide O&M cost as a percentage of total costs for the Company on an annual basis over the time period 1999-2003.

DOER 1-16: Refer to Exhibit BSG/LRK-1, p. 17, where you discuss the steel infrastructure replacement rate adjustment mechanism.

a. Please discuss whether there is any interdependence between the investments that will be funded by this replacement mechanism and company's overall cost and productivity levels.
b. Please discuss whether the investments that will be funded by this replacement mechanism will impact the setting of future X-factors and the formulation of PBR plans.

DOER 1-17: Refer to Exhibit BSG/LRK-1, p. 18 and the discussion of the earning share mechanisms.

a. Please provide the actual return on common equity values for Boston Gas and Bay State Gas for the years 1990-2003.
b. Please explain the relationship between the value chosen for an X-factor and the future return on common equity values.
c. Please explain whether the bandwidth established in D.P.U. 96-50 is still applicable in the current low-interest-rate environment.

DATED: June 20, 2005